	Application No.	Applicant(s)
Notice of Allowability	10/743,729	KOBAYASHI ET AL.
	Examiner	Art Unit	
	Matthew T. Henning	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the request for continued examination filed 1/16/2007*.

2. ☒ The allowed claim(s) is/are *1-9, 11-14, 16-17*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

This action is in response to the communication filed on 1/16/2007.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 12/14/2006 has been entered.

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EXAMINER'S AMENDMENT

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An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Carl I. Brundidge on 3/14/2007.

The application has been amended as follows:

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present
application.

Listing of Claims:

1. (currently amended) A stream server apparatus connected to a
first network and a second network, said stream server apparatus
comprising:

wherein said first network connects said stream server apparatus
and a first client apparatus and a firewall apparatus;

wherein said second network connects said stream server apparatus
and a second client apparatus and said firewall apparatus,

wherein said stream server apparatus communicates via a first path
that includes said first network and said first client apparatus, via a second
path that includes said first network and said firewall apparatus and said
second client apparatus, and via a third path that includes said second
network and said second client apparatus; a first interface which transmits

and receives control request packets and data packets to and from said first

client apparatus via the first path and being capable of transmitting and

receiving control request packets to and from said second client apparatus via

said second path;

a second interface which transmits and receives data packets to and

from the second client apparatus via the third path;

a stream transport management module which specifies said first

interface or said second interface in accordance with a network attribute of the

first client apparatus and the second client apparatus, and specifies

distribution protocol for each client apparatus based on a network to which

said client apparatus is connected,

wherein, if the destination of transmission is said first client apparatus

which is connected to said first network, then bandwidth control is executed

and said first client apparatus is notified of a port number identifying a port

through which communications are to be conducted,

wherein if the destination of transmission is said second client

apparatus which is connected to said second network, then bandwidth control

is not executed by said stream server apparatus and said second client

apparatus is notified of a dummy port number identifying a dummy port

through which communications are not conducted;

a bandwidth management processing module which dynamically

assigns a port and identifies the port by a port number and executes the

bandwidth control based on a bandwidth control protocol for controlling a

bandwidth of the stream data distribution; and

a process module which executes a communication process based on communication protocols related to said first and second client apparatuses via said first interface or the second interface.

2.   (previously presented)   The stream server apparatus according to claim 1, wherein said process module executes a stream data distribution process based on a same protocol for both said first client apparatus and said second client apparatus.

3.   (original)   The stream server apparatus according to claim 2, wherein said communication protocol uses a user datagram protocol.

4.   (previously presented)   The stream server apparatus according to claim 1, further comprising:

a control request reception module which notifies an ID of the interface specified by said stream transport management module to the client apparatuses.

5.   (previously presented)   The stream server apparatus according to claim 1, wherein said stream transport management module specifies said first interface, if the communication protocol includes a reception process of a packet for said stream server apparatus from said second client apparatus via said second path.

6.   (previously presented)   The stream server apparatus according to claim 1, wherein said stream transport management module specifies said second interface, if the communication protocol does not include a reception process of a packet for said stream server apparatus from said second client apparatus via said second path.

7.   (previously presented)   The stream server apparatus according to claim 1, wherein said stream transport management module specifies said second interface, if the communication protocol is said stream data distributing protocol from said stream server apparatus for said second client apparatus via said third path.

8.   (previously presented)   The stream server apparatus according to claim 1, wherein said stream transport management module specifies said first interface, if the client apparatus belongs to the same network as said first network to which said stream server apparatus belongs.

9.   (previously presented)   The stream server apparatus according to claim 4, wherein said control request reception module notifies said second client apparatus of the ID of the specified interface, said ID being not a local ID distinguishable by said first network but a global ID capable of being translated into the local ID by a network relay apparatus en route to said second client apparatus via said second path and said third path.

Claim 10 (canceled).

11.   (currently amended) A network attached storage system for

managing a file system and distributing stream data stored in a storage unit to

client apparatuses via networks, said network attached storage system, being

connected to a first network and a second network, comprising:

a stream server apparatus for distributing the stream data,

wherein said first network connects said stream server apparatus and a

first client apparatus and a firewall apparatus;

wherein said second network connects said stream server apparatus

and a second client apparatus and said firewall apparatus,

wherein said stream server apparatus communicates via a first path

that includes said first network and said first client apparatus, via a second

path that includes said first network and said firewall apparatus and said

second client apparatus, and via a third path that includes said second

network and said second client apparatus;

a first interface, coupled to said stream server apparatus, for

transmitting and receiving control request packets and data packets to and

from said first client apparatus via the first path and being capable of

transmitting and receiving control request packets to and from said second

client apparatus via said second path; and

a second interface, coupled to said stream server apparatus, for

transmitting and receiving data packets to and from the second client

apparatus via the third path,

wherein said stream server apparatus comprises:

a stream transport management module which specifies said first

interface or said second interface in accordance with a network attribute of the

first client apparatus and the second client apparatus, specifies distribution

protocol for each client apparatus based on a network to which said client

apparatus is connected,

wherein, if the destination of transmission is said first client apparatus

which is connected to said first network, then bandwidth control is executed

and said first client apparatus is notified of a port number identifying a port

through which communications are to be conducted,

wherein if the destination of transmission is said second client

apparatus which is connected to said second network, then bandwidth control

is not executed by said stream server apparatus and said second client

apparatus is notified of a dummy port number identifying a dummy port

through which communications are not conducted,

a bandwidth management processing module which dynamically

assigns a port and identifies the port by a port number and executes the

bandwidth control based on a bandwidth control protocol for controlling a

bandwidth of the stream data distribution, and

a process module which executes a communication process based on

communication protocols related to said first and second client apparatuses

via said first interface or said second interface.

12.   (currently amended) An apparatus including a storage medium

with a program contained therein, the program executable by a stream server

apparatus connected to a first network and a second network, wherein said

first network connects said stream server apparatus and a first client

apparatus and a firewall apparatus, wherein said second network connects

said stream server apparatus and a second client apparatus and said firewall

apparatus, wherein said stream server apparatus communicates via a first

path that includes said first network and said first client apparatus, via a

second path that includes said first network and said firewall apparatus and

said second client apparatus, and via a third path that includes said second

network and said second client apparatus, wherein said stream server

apparatus comprises a first interface which transmits and receives receiving

control request packets and data packets to and from said first client

apparatus via the first path and being capable of transmitting and receiving

control request packets to and from said second client apparatus via said

second path, and a second interface which transmits and receives data

packets to and from the second client apparatus via the third path, said

second interface being connected to a wide area network, said program,

when executed, causing the stream server apparatus to perform:

a stream transport management step of identifying said first interface or

said second interface in accordance with a network attribute of the first client

apparatus and the second client apparatus and specifying a distribution

protocol for each client apparatus based on a network to which said client

apparatus is connected,

wherein, if the destination of transmission is said first client apparatus

which is connected to said first network, then bandwidth control is executed

and said first client apparatus is notified of a port number identifying a port

through which communications are to be conducted,

wherein if the destination of transmission is said second client

apparatus which is connected to said second network, then bandwidth control

is not executed by said stream server apparatus and said second client

apparatus is notified of a dummy port number identifying a dummy port

through which communications are not conducted,

a bandwidth management processing step of dynamically assigning a

port and identifying the port by a port number, and executing the bandwidth

control based on a bandwidth control protocol for controlling a bandwidth of

the stream data distribution; and

a step of executing a communication process based on the

communication protocols related to said first and second client apparatuses

via said first interface or said second interface.

13.   (currently amended) A stream server apparatus connected to a

first network and a second network, said stream server apparatus comprising:

wherein said first network connects said stream server apparatus and a

first client apparatus and a firewall apparatus;

wherein said second network connects said stream server apparatus

and a second client apparatus and said firewall apparatus,

wherein said stream server apparatus communicates via a first path

that includes said first network and said first client apparatus, via a second

path that includes said first network and said firewall apparatus and said

second client apparatus, and via a third path that includes said second

network and said second client apparatus;

a first interface which transmits and receives control request packets

and data packets to and from said first client apparatus via the first path and

being capable of transmitting and receiving control request packets to and

from said second client apparatus via said second path;

a second interface which transmits and receives data packets to and

from the second client apparatus via the third path;

a stream transport management module which specifies said first

interface or said second interface in accordance with a network attribute of the

first client apparatus and the second client apparatus, and specifies

distribution protocol for each client apparatus based on a network to which

said client apparatus is connected,

wherein, if the destination of transmission is said first client apparatus

which is connected to said first network, then bandwidth control is executed

by said stream server apparatus and said first client apparatus is notified of a

port number identifying a port through which communications are to be

conducted,

wherein if the destination of transmission is said second client

apparatus which is connected to said second network, then bandwidth control

is not executed and said second client apparatus is notified of a dummy port

number identifying a dummy port through which communications are not

conducted;

a bandwidth management processing module which dynamically

assigns a port and identifies the port by a port number and executes the

bandwidth control based on a bandwidth control protocol for controlling a

bandwidth of the stream data distribution; and

a process module which executes a communication process based on

communication protocols related to said first and second client apparatuses

via said first interface or said second interface,

·wherein said process module executes a stream data distribution

process based on a user datagram protocol (UDP) as the same

communication protocol both for the first and second client apparatuses.

14.   (previously presented)   The stream server apparatus

according to claim 1, wherein said stream transport management module

specifies the first or second interface in accordance with a network address of

the first or second network received from the first or second client apparatus

via·the first or the second path.

Claim 15 (canceled).

16.   (previously presented)   The apparatus according to claim 12,

wherein said stream transport management step comprises:

a step of specifying the first or second interface in accordance with a

network address of the first or second network received from the first or

second client apparatus via the first or second path.

17.   (previously presented)   The stream server apparatus

according to claim 13, wherein said stream transport management module

specifies the first or second interface in accordance with a network address of

the first or second network received from the first or second client apparatus

via the first or second path.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

The prior art, particularly Even et al. (US Patent Application Publication 2004/0114612 A1),

disclosed a network of the same structure as claimed, including the first and second networks,

the first and second clients, the first and second and third paths, and the stream server, and the

multiple interfaces, as seen in Even Fig. 2. Even further disclosed choosing the paths based on

the client locations and the type of communication as seen in Even Paragraphs 0028-0030 and

0040-0041. However, Even did not disclose the use of bandwidth management.

Bandwidth management is well known in the art, and in general would have been

obvious. However, the particular combination of limitations as claimed, including bandwidth

control for a client on one network and not for a client on another network by the use of dummy

port numbers, has not been taught or suggested by the prior art.

Conclusion

Claims 1-9, 11-14, and 16-17 are allowed.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.

The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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03/14/2007